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JUN 30 2006

PATENT

Filed: September 11, 2003

CASE NO.: HSI920030121US1  
Serial No.: 10/660,898  
June 30, 2006  
Page 2

1. (currently amended) A disk drive controller executing logic including:

establishing an active region on a disk in a disk drive associated with the controller, the active region being immediately under a motion limiting element that protrudes toward the disk such that effects of mechanical shock to the disk drive during read and/or write operations are mitigated in the active region compared to effects of mechanical shock to at least one archive region[[s]] on the disk, data being moved from the active region to the archive region from time to time other than the active region; and

in response to write commands, always writing data to the active region.

2. (previously presented) The controller of Claim 1, wherein the logic further comprises:

moving data from the active region to an archive region based on at least one of: recency of last access of the data, whether a time for archiving has occurred, or whether a motion sensing threshold has been reached.

3. (currently amended) The controller of Claim 1, wherein the active region is at least one and only one of: an outer annular region of the disk, or an inner annular region of the disk.

4. (original) The controller of Claim 2, wherein data is moved from the archive region to the active region if the data previously has been accessed within a predetermined period.

CASE NO.: HSJ920030121US1  
Serial No.: 10/660,898  
June 30, 2006  
Page 3

PATENT  
Filed: September 11, 2003

5. (canceled).

6. (original) The controller of Claim 2, wherein data is moved from the archive region to the active region only in the absence of motion of the disk drive below a threshold.

7. (currently amended) A hard disk drive, comprising:

motion limiting means protruding toward a disk for establishing an active region on the disk directly below the motion limiting means, an archive region of the disk also being established into which data is written from the active region from time to time based at least in part on whether a motion sensing threshold has been reached; and

means for, in response to write command, always writing data to the active region.

8. (original) The hard disk drive of Claim 7, wherein the means for writing writes data from the archive region to the active region based on frequency and/or recency of access of the data.

9. (currently amended) The hard disk drive of Claim 7, further comprising:

means for moving data from the active region to an archive region based on at least one of: recency of last access of the data, or whether a time for archiving has occurred, ~~or whether a motion sensing threshold has been reached.~~

CASE NO.: HSJ920030121US1  
Serial No.: 10/660,898  
June 30, 2006  
Page 4

PATENT  
Filed: September 11, 2003

10. (currently amended) The hard disk drive of Claim 7, wherein the active region is an outer annular region of the disk and does not extend into an inner annular region of the disk.

11. (original) The hard disk drive of Claim 9, wherein data is moved from the archive region to the active region if the data previously has been accessed within a predetermined period.

12. (canceled).

13. (currently amended) A hard disk drive, comprising:  
at least one disk having an active region and an archive region;  
at least one controller controlling read and write operations on the disk; and  
at least one motion limiting element being directly above and protruding toward the active region, the controller selectively moving data from the archive region to the active region without regard for the type of data being moved, wherein the active region corresponds to a region of the disk wherein effects of mechanical shock to the disk drive during read and/or write operations are mitigated compared to effects of mechanical shock in the archive region.

14. (canceled).

CASE NO.: HSJ920030121US1  
Serial No.: 10/660,898  
June 30, 2006  
Page 5

PATENT  
Filed: September 11, 2003

15. (original) The hard disk drive of Claim 13, wherein the controller stores data in the active region based on frequency and/or recency of access of the data.

16. (previously presented) The hard disk drive of Claim 13, wherein the controller moves data from the active region to the archive region based on at least one of: recency of last access of the data, whether a time for archiving has occurred, or whether a motion sensing threshold has been reached.

17. (currently amended) The hard disk drive of Claim 13, wherein the active region is ~~at least~~ one and only one of: an outer annular region of the disk, or an inner annular region of the disk.

18. (original) The hard disk drive of Claim 13, wherein data is moved from the archive region to the active region if the data has been accessed within a predetermined period.